

IN THE ABSTRACT:

Please amend the abstract as follows:

~~Some of the set of classes within a computer program are important in the sense that the most useful information about the software can be derived from these classes alone. The important classes within the software are identified, as well as any dependent classes. Test cases are defined and associated with all classes. A code change for a class invokes the relevant test case or cases being run. The corresponding test case or cases for any dependent class are also run. If they run successfully (in the sense that the expected results arise), then it is highly likely that the changes introduced in the first class are not affecting the correct execution of the dependent classes.~~

A system and method determine the possibility of adverse effect arising from a code change in a computer program. The system and method comprise the steps of identifying important classes within a computer program and determining directly and indirectly dependent classes of the important classes. The important classes comprise superclasses of the directly and indirectly dependent classes. The method associates test cases with the important classes and with the directly and indirectly dependent classes.

Additionally, for a given code change to first important class, the method runs all test cases associated with the first important class and associated with dependent classes of the first important class, and indicates the possibility of an adverse effect if any run test case fails.